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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/518,973

07/29/2005

Takayuki Miura

SONYJP 3.3-373

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530 7590 12/09/2009  
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EXAMINER

SMITHERS, MATTHEW

ART UNIT

PAPER NUMBER

2437

MAIL DATE

DELIVERY MODE

12/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Supplemental  
Notice of Allowability**

Application No.

10/518,973

Examiner

Matthew B. Smithers

Applicant(s)

MIURA ET AL.

Art Unit

2437

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to an amendment filed on July 7, 2009.
2. ☒ The allowed claim(s) is/are 1-16.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some\* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
- \* Certified copies not received: \_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |  |   |
|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date ____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date ____     | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other ____.   |

## **DETAILED ACTION**

### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Mr. Davy Zoneraich on October 15, 2009.

The application has been amended as follows:

#### **IN THE CLAIMS:**

12 (Currently Amended) A computer readable recording medium including a terminal device program in the terminal device that is granted device authentication in the device authentication system according to claim I, the terminal device including a computer, the terminal device program realizing:  
a reception function for receiving from the authentication server a random number and random-number identification information for identifying the random number;  
a conversion function for generating a conversion value by converting a set of the received random number and the confidential information using a one-way function; and  
a transmission function for transmitting the generated conversion value, the received random-number identification information, and confidential-information identification information for identifying the confidential information in the authentication server.

13. (Currently Amended) A computer readable recording medium including an authentication program in the authentication server for granting device authentication to the terminal device according to claim 2, the authentication server including a computer, the authentication program realizing:

a random-number acquisition function for acquiring a random number;

a transmission function for transmitting to the terminal device the acquired random number and random-number identification information for identifying the random number;

a reception function for receiving from the terminal device a conversion value, the random-number identification information, and confidential-information identification information;

a random-number identification function for identifying the random number transmitted to the terminal device using the received random-number identification information;

a confidential-information identification function for identifying the confidential information of the device terminal using the received confidential-information identification information;

a conversion function for generating a conversion value by converting a set of the identified confidential information and the random number using the same one-way function as that used by the terminal device; and

a device authentication function for granting device authentication to the terminal device using the received conversion value and the generated conversion value.

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14. (Currently Amended) A computer readable recording medium including a service server program in the service server according to claim 4, the service server including a computer, the service server program realizing:

- a random-number acquisition function for acquiring a random number;
- a random-number transmission function for transmitting the acquired random number to the terminal device;
- a reception function for receiving from the terminal device a conversion value generated using the confidential information and confidential-information identification information;
- a random-number identification function for identifying the random number transmitted to the terminal device;
- an authentication-information transmission function for transmitting, to the authentication server, authentication information including the received conversion value, the confidential-information identification information, and the identified random number; and
- an authentication-result reception function for receiving from the authentication server a result of authentication based on the transmitted authentication information.

15. (Currently Amended) A computer readable recording medium including a terminal device program in the terminal device receiving a service from the service server according to claim 4, the terminal device including a computer, the terminal device program realizing:

- a random-number reception function for receiving a random number from the service server;

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a conversion function for generating a conversion value by converting a set of the received random number and the confidential information by the use of a one-way function; and a transmission function for transmitting the generated conversion value and confidential-information identification information for identifying the confidential information in the authentication server.

16. (Currently Amended) A computer readable recording medium including an authentication program in the authentication server for granting device authentication to the device terminal when the service server according to claim 4 provides a service, the authentication server including a computer, the authentication program realizing:  
a reception function for receiving, from the service server, authentication information including a conversion value, confidential-information identification information, and a random number;  
a confidential-information identification function for identifying the confidential information of the terminal device by the use of the received confidential-information identification information;  
a conversion function for generating a conversion value by converting a set of the received random number and the identified confidential information by the use of the same one-way function as that used by the terminal device; and  
a device authentication function for granting device authenticating to the terminal device by the use of the received conversion value and the generated conversion value.

Claim 17 (Canceled).

Claim 18 (Canceled).

Claim 19 (Canceled).

***Allowable Subject Matter***

The following is an examiner's statement of reasons for allowance: The present invention is directed to a method and system for authenticating electronic consumer devices in a network. Each independent claim identifies the uniquely distinct features of "the terminal device acquires a random number and random number identification information identifying the random number, and generates a conversion value by converting a set of the acquired random number and the confidential information using a one-way function; the authentication server acquires (i) the random number acquired by the terminal device, using the random number identification information acquired by the terminal device, (ii) the confidential information of the terminal device, and (iii) the conversion value generated by the terminal device;  
a conversion value is generated by the authentication server by converting the set of the acquired random number and the confidential information acquired by the authentication server using the same one-way function as that used by the terminal device; and  
the conversion value generated by the terminal device is compared with the conversion value generated by the authentication server". The closest prior art, Saito US 7,317,798, fails to anticipate or render the above underlined limitations obvious.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

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accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew B. Smithers whose telephone number is (571) 272-3876. The examiner can normally be reached on Monday-Friday (8:00-4:30) EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel L. Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew B Smithers/



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Primary Examiner, Art Unit 2437